U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

Map database for surficial materials in the conterminous United States

By D.R. Soller, M.C. Reheis, C.P. Garrity, and D.R. Van Sistine
Scale 1:5,000,000
USGS Data Series 425
Online linkage: http://pubs.usgs.gov/ds/425/

INTRODUCTION
The Earth's bedrock is overlain in many places by a loosely compacted and mostly unconsolidated blanket of sediments, or by weathered, residual soil material. For the conterminous United States, these materials were shown on a map by Soller and Reheis (U.S. Geological Survey Open-file report 03-275, 2004, scale 1:5,000,000; http://pubs.usgs.gov/of/2003/of03-275/). That map was published as a PDF file, from an Adobe Illustrator-formatted version of the provisional unpublished GIS database. The provisional GIS files were further edited and processed without modifying the content of the published map (except for the differentiation of "Volcanic rocks" into "basaltic and andesitic" and "rhyolitic"), and are here published.

Digital datasets and corresponding metadata files are stored in both ESRI file geodatabase and shapefile formats. Geologic unit polygons and lines are stored in feature classes in the geodatabase. Geologic unit polygon data were attributed for name, description, and geologic age. Users interested in the methods used for compiling this map should carefully refer to the Purpose and Processing Steps in the metadata, and to the Caveats section of Soller and Reheis (2004).

GETTING STARTED

The map database and associated files are bundled in downloadable zip files, one containing the database in ESRI GeoDatabase format ("USGS_DS_425.zip"), and one in ESRI Shapefile format ("USGS_DS_425_SHAPES.zip").

To install:

Download either zip file (~58 MB space required for GeoDatabase format, 159 MB for Shapefile format)

Open with Winzip or other zip utility and click the "Extract" button (highlighting of the individual files is not necessary)

Extract contents to a destination on the local hard drive

FOLDER CONTENTS

When USGS_DS_425.zip is extracted, a folder by the same name is created. The contents of the folder are:

Surficial_Mtls_US.mxd – ArcGIS map document that launches the program.
Surficial_materials.gdb – ArcGIS file geodatabase containing comprehensive spatial data.
"Layer_files" folder containing ArcGIS symbology files for selected feature classes in the file geodatabase.

When USGS_DS_425_SHAPES.zip is extracted, a folder by the same name is created. The contents of the folder are:

Contacts shapefile
State line shapefile
Surficial materials shapefile

METADATA
Each feature class has associated metadata files that are viewable and exportable through ArcCatalog. To view a metadata file, simply click on the feature class in ArcCatalog and then click the Metadata tab.

SYSTEM REQUIREMENTS
ArcGIS Desktop 9.X
Windows XP /Windows 2000
CPU Speed: 1.0 GHz recommended or higher
Processor: Intel Pentium or Intel Xeon Processors
Memory/RAM: 512 MB minimum, 1 GB recommended or higher
Display Color: Greater than 256 color depth
Data Disk Space Requirements: 80 MB File Geodatabase and associated files (Unzipped)

Inquiries about this publication should be addressed to:

David R. Soller
U.S. Geological Survey
Project Chief, National Geologic Map Database
12201 Sunrise Valley Drive
MS 926-A National Center
Reston, VA 20192
Telephone: 703-648-6907
Email: drsoller@usgs.gov